

Mineral Industry Surveys

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ANTIMONY IN THE FIRST QUARTER 2006

Consumption of primary antimony in the first quarter of 2006 was estimated by the U.S. Geological Survey to be about 14% more than that in the fourth quarter of 2005 and about 6% lower than that in the first quarter of 2005. During the first 2 months of 2006, China was the leading supplier of antimony metal and antimony oxide to the United States, with Mexico second for both materials.

Antimony prices rose sharply during the first quarter of 2006. The Platts Metals Week New York dealer price for antimony metal started the first quarter in the range of \$1.82 to \$1.89 per pound and rose steadily, ending the first quarter at \$2.30 to \$2.35 per pound.

The Korea Resources Corp. (Seoul, Republic of Korea) announced that the Republic of Korea was planning to stockpile strategic reserves of 14 minor metals including antimony. Korea already maintains stockpiles of major base metals such as aluminum and copper. Plans called for the building of a warehouse in 2006 to house 85,600 metric tons (t) of the 14 metals, the equivalent of 2 months of import demand for Korea. The Government planned to spend \$188 million over 10 years, beginning in 2007. The program was expected to stabilize the supply of these minor metals for the country's information technology industries (Metal-Pages, 2006b§¹).

In China, Hunan Nonferrous Metals Co. Ltd., the country's leading producer of antimony, announced that it planned to make an initial public offering of its stock on March 28. Hunan sought to raise from \$166 to \$229 million through the public offering. The funds would be used to explore for or acquire new mineral resources, develop ore reserves at existing mines, and to change the company's product mix towards more value-added products. Among Hunan's subsidiaries is Xikuangshan Shanxing Antimony Corp., the world's largest producer of antimony with a production capacity of 40,000 metric tons per year (t/yr). The company operates four plants and two mines (Metal-Pages, 2006a§).

Also in China, Zhong Nan Antimony and Tungsten Trading Co. Ltd. (Hunan Province) announced that it had signed an

¹References that include a section mark (§) are found in the Internet References Cited section.

agreement to take all the antimony concentrate from AGD Mining Corp.'s Costerfield Mine in Australia. Reportedly, Zhong Nan would pay 65% of the prevailing antimony market price for the contained antimony. Costerfield was expected to be commissioned in April 2006 and was expected to reach its full output of 5,500 t/yr of contained antimony by May 2006. The mine will be an open pit operation for the first 12 to 18 months, followed by underground operations for the balance of its life, estimated to be 3 years based on probable reserves. The project was projected to cost \$9 million, which AGD has raised through equity, and a \$4 million loan from its parent Cambrian Mining Plc (Metal-Pages, 2006c§).

Update

In May, U.S. Antimony Corp. (Thompson Falls, MT) announced that it planned to produce about 9,000 t (20 million pounds) of antimony metal and oxide per year once it had refurbished its U.S. Antimony de Mexico SA de CV smelter in Estacion Madero, Coahuila, Mexico. The company is investing \$500,000 to replace a furnace and install a sulfur dioxide scrubber. The smelter, which has not operated for 7 years, is expected to produce about 5 metric tons per day of antimony metal as well as antimony oxide. The company plans to start up the smelter in August 2006, initially using ore from third parties, until it is able to bring a mine near Mexico City onstream at the end of 2006. The metal product will be shipped to the parent company's plant in Thompson Falls, MT, where gold and silver will be extracted and 99%- to 99.5%-pure antimony metal produced. The Montana plant produces about 900 t/yr of antimony by reprocessing smelter byproducts (American Metal Market, 2006).

Reference Cited

American Metal Market, 2006, U.S. Antimony sets output goal for restarted Mexican operation: American Metal Market, v. 114, no. 19-4, May 18, p. 4.

Internet References Cited

Metal-Pages, 2006a (March 21), Hunan Nonferrous IPO confirmed, accessed March 21, 2006, via URL http://www.metal-pages.com.

Metal-Pages, 2006b (March 9), South Korea to stock strategic minor metals, accessed March 10, 2006, via URL http://www.metal-pages.com.

Metal-Pages, 2006c (February 20), Zhong Nan Antimony and AGD sign antimony offtake agreement, accessed February 20, 2006, via URL http://www.metal-pages.com.

$\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{SALIENT ANTIMONY STATISTICS}^1$

(Metric tons, antimony content, unless otherwise specified)

	20	2006		
	Total ^p	Fourth quarter	First quarter	
Production:				
Primary smelter ²				
Secondary	W	W	W	
Imports for consumption:	29,200	6,940 ^r	5,450 ³	
Ore and concentrate	204	29 ^r	³	
Metal	6,370	1,530 ^r	911 ³	
Oxide ⁴	22,700	5,380 ^r	4,540 ³	
Exports:	2,420	557 ^r	395 ³	
Metal, alloys, and scrap (gross weight)	741	186 ^r	51 ³	
Oxide ⁴	1,680	371 ^r	344 ³	
Consumption of primary antimony	10,200	2,380 ^r	2,710	
Price: Average, cents per pound ⁵	160.46	181.83	199.25	
Stocks, end of period ⁶	XX	1,900 ^r	1,920	

^rRevised. W Withheld to avoid disclosing company proprietary data. XX Not applicable. -- Zero.

TABLE 2 INDUSTRY STOCKS OF PRIMARY ANTIMONY IN THE UNITED STATES¹

(Metric tons, antimony content)

	2005 ²	2006 ²	
Class of material	Fourth quarter	First quarter	
Oxide	1,430 ^r	1,470	
Other ³	478 ^r	443	
Total	1,900 ^r	1,920	

rRevised.

 $\label{eq:table 3} \textbf{CONSUMPTION OF PRIMARY ANTIMONY}^{1,\,2}$

(Metric tons, antimony content)

	2005 ²		2006	
Class of material consumed	Total ^p	Fourth quarter	First quarter	
Oxide	8,590 ^r	2,030 ^r	2,150	
Other ³	1,580	345	559	
Total	10,200 r	2,380 ^r	2,710	

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits, except prices.

²Nearly all primary smelter output is antimony trioxide.

³Data for January and February only; March data were not available at time of publication.

⁴Antimony content is calculated by the U.S. Geological Survey.

⁵Source: Platts Metals Week. New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.

⁶Producer and consumer stocks.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Estimated 100% coverage based on quarterly respondents and respondents who held 42% of the total stocks of antimony at the end of 2004.

³Includes ore and concentrate, sulfide, and residues.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

 $^{^2}$ Estimated 100% coverage based quarterly respondents and respondents who consumed 73% of the total antimony in 2004.

³Includes ores and concentrates, metal, sulfide, and residues.

TABLE 4 CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL PRODUCED $^{\rm 1}$

(Metric tons, antimony content)

	2	2005		
Product	Total ^p	Fourth quarter	First quarter	
Metal ²	W	W	W	
Nonmetal ³	W	W	W	
Flame-retardants:				
Plastics	371 ^r	99 ^r	106	
Other ⁴	612	135	157	
Total	982 ^r	234 ^r	263	
Reported consumption	2,720 ^r	630 ^r	750	
Total consumption ⁵	10,200 ^r	2,380 ^r	2,710	

^pPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Reported consumption."

 ${\it TABLE~5} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~ANTIMONY,~BY~CLASS~AND~COUNTRY}^1$

(Metric tons, antimony content)

	2005			2006		
			Fourth			January-
Class and country	Total ^{p, 2}	December	quarter	January	February	February ²
Ore and concentrate:						
China	147	9	29			
Other	57					
Total	204	9	29			
Metal:	_ (
China	3,870	227	1,030	453	199	652
Mexico	900	47	173	138	5	143
Peru	461		86	77	18	95
Other	1,140	46	244	10	11	21
Total	6,370	320	1,530	678	233	911
Oxide: ³						
Belgium	1,550	109	365	105	121	225
China	9,510	673	2,090	1,240	848	2,090
Hong Kong	146		33			
Mexico	9,930	931	2,320	730	768	1,500
Other	1,530	190	577	201	527	729
Total	22,700	1,900	5,380	2,280	2,260	4,540
Grand total	29,200	2,230	6,940	2,960	2,500	5,450
Other antimony compounds (gross weight)	53		5			

^pPreliminary. -- Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes adhesives, pigments, rubber, and textiles.

³Includes ammunition, antimonial lead, bearing metals and bearings, cable coverings, castings, sheet and pipe, and solder.

⁴Includes ammunition primers, pigments, ceramics and glass, and plastics.

⁵Estimated 100% coverage based on quarterly respondents and respondents who consumed 73% of the total antimony in 2004.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revisions to prior months data.

³Antimony content is calculated by the U.S. Geological Survey.